

a yearly growth of timber equal to the present yearly consumption of timber in New Zealand eleven times the present total plantation expenditure would be required. The present plantations have cost to date £361,097. Eleven times that figure is £3,972,067. Therefore, in round numbers, four millions' worth of the present class of planting would be required to provide for the yearly consumption of timber in New Zealand at the present rate.

This, however, is not the whole of the story. It will take an average of at least forty years for the plantation timber to mature, so that, allowing compound interest at 4 per cent. for forty years, the four millions become £19,200,000. After forty years it would be uncertain whether the £19,200,000 expenditure would have to be repeated, or whether, as in the native forest, natural regeneration could be depended upon. I put forward these figures not as showing that forest-planting is impossible in New Zealand, but to indicate what happens when attempting to carry out the crude idea of the "man in the street" that forestry consists in cutting down one tree and planting another.

As a rule the forester looks on planting as a last resort, and in New Zealand, with labour as high as it is, he may come to regard it as a surgical operation—only to be resorted to when every attempt to get natural regeneration has failed. A little reflection will show that this must be so. Every tree selected by the forester for felling rejuvenates the forest and brings in revenue; every tree planted costs something, and that something goes on piling up compound interest at 4 per cent. for a term of years till the tree is ripe for cutting. To destroy the existing forests of New Zealand and replace them entirely by plantations—looking on the matter purely as one of pounds shillings and pence—would cost New Zealand something between nineteen millions sterling and nineteen millions plus the cost of regeneration at the end of some forty years. And this, as we have seen, is to provide only for the needs in timber of the present small population. The nineteen millions does nothing to meet the loss of the natural export trade in softwoods to Australia, or the serious injury to such New Zealand industries as might be expected to develop with increasing population and national forestry, such as furniture and paper making, tanneries, &c.

The question of plantations *versus* natural forest was stated judicially by the late Inspector-General of Forests, India (the highest forest official in the British Empire), when he visited Victoria and reported on its forestry to the Victorian Government. He said, "Planting on a large scale is costly, and it will be found, if an accurate ledger is kept of the original outlay and all its incidental expenses, that artificial-forest cultivation will repay the money and